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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/597,960

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Per Olof Magnus Magnusson

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10/14/2009

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EXAMINER

CHACKO, JOE

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/597,960	Applicant(s) MAGNUSSON ET AL.	
	Examiner JOE CHACKO	Art Unit 2456	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 July 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5, 7-13, 15 and 16 is/are pending in the application.
- 4a) Of the above claim(s) 6 and 14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-13, 15, 16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This office action is in response to the amendments filed on 7/24/2009. Claims 1-16 are pending. Claims 1, 9 and 13 have been amended. Claims 6 and 14 are cancelled.

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7/24/2009 has been entered.

Response to Arguments

3. Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 1-5, 7-13, 15 and 16** are rejected under 35 U.S.C. 103(a) as being unpatentable over Koskiahde (WO 03/047183 A1) in view of Veerapalli et al. (U.S.

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Patent Pub. No. 2003/0153325 A1, hereinafter "Veerapalli") in further view of Sharma et al. (U.S. Patent No. 6, 766,165 B2, hereinafter "Sharma")

As to **claim 1**, Koskiahde discloses a system a data unit processing entity (fig.1, 30, home agent) in a data unit transmission network (fig.1) , said data unit transmission network associated with a plurality of network nodes (fig.1, 10, mobile node, 20, correspondent node) , said plurality of network nodes including routing nodes (fig.1, 30, home agent) and end nodes (fig.1, 10, mobile node, 20, correspondent node), said routing nodes being arranged to route data units over said data unit transmission network in accordance with a routing protocol (pg.6, 22-24), one or more of said end nodes being mobile nodes capable of accessing said data unit transmission network over more than one link (pg.6, lines 27-32; where mobile node can move from its home network to other links) , said network nodes being arranged to distinguish between a first type routing address and a second type routing address in said data units (pg.2, lines 28-32; where mobile nodes usually have two routing addresses , one which is their home address and the other a temporary address), said first type routing address (pg.2, lines 28; static home addresses by which a mobile node is always identified) serving to identify network nodes and said second type routing address (pg.2 ,lines 23-30; where each mobile node has a temporary address called a care-of-address which identifies its current location) serving to allow routing to mobile nodes, said data unit processing entity comprising:

a decision data memory storing decision data for associating one or more second type routing addresses(pg.7, lines 8-9, care-of-address) for a particular first type routing addresses (pg.7,lines 2-5; where the binding update is received by the home agent and associates the home address of the mobile node to its care-of-address) :

a decision part for receiving a data unit that is to be forwarded and for setting a second type routing address (pg.7 , lines 8-9; care-of-address) in a said received data unit (pg.7,lines 2-4; where the binding update is received by the home agent described the care-of-address) that is to be forwarded,

Koskiahde does not disclose a system with a decision part set in said received data unit that is to be forwarded and on decision data stored in association with said first type routing address in a decision data memory and a management part for said decision data memory, where said management part provides an interface to said decision data memory for modifying said decision data.

In an analogous art, Veerepalli et al discloses a system wherein an operation of said decision part depending on a first type routing address ([0069]; where IP address is provided to the mobile node based on the registration request from a mobile node) set in said received data unit that is to be forwarded and on said decision data stored in association with said first type routing address in said decision data memory ([0071]; where the home agent stores information describing its mobile nodes so that it can route data to the mobile node),

a management part **further comprising**:

a first interface to said decision data memory for modifying said decision data ([0058]; where a mobile node may change the information regarding its new care of address using a registration request message),

At the time of the invention, it would have been obvious to a person of ordinary skilled in the art to modify Koskiahde by incorporating a decision part for setting the second type routing address and a management part for said decision data memory as disclosed by Veerepalli. The rationale behind this modification is that all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention.

However, Veerepalli does not disclose a wherein for updating said decision data memory a network control function entity, a second interface to one of said mobile nodes for allowing said mobile node to modify said decision data over said first interface, and a third interface to said network control function entity allowing said network control function entity access to said decision data memory for modifying said

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decision data and wherein said second interface and said third interface are two independent and separate interfaces to said management part.

Sharma does disclose a system wherein **a network control function entity (fig.3, 318, 320, NMS) for updating said decision data memory** (column 13, line 62- column 14, line 17; the NMS server can store information in a access control list database and also store network topology in a view database);

a second interface to one of said mobile nodes for allowing said mobile node to modify said decision data over said first interface, (column 10, lines 38-42; the mobile wireless device can communicate with the central NMS directly and network management capability is provided) **and**

a third interface to said network control function entity (column 10, lines 7-9; the central NMS communicates with the local NMS via a physical connection) allowing said network control function entity access to said decision data memory for modifying said decision data (column 10, lines 55-61; the Local NMS communicates and provides network management capability over multiple networks and mobile devices) **and wherein said second interface and said third interface are two independent and separate interfaces to said management part.** (fig.3; the second interface for the mobile devices to the central NMS and the physical connection from the local NMS to the central NMS is independent)

At the time of the invention, it would have been obvious to a person of ordinary skilled in the art to modify Koskiahde- Veerepalli by incorporating a second interface from the mobile node to the central NMS and a third interface from the Local NMS to the central NMS to provide network management capabilities as disclosed by Sharma. The motivation behind this modification is that it allows to efficiently manage networks, both ground-based and wireless, through a mobile capable device or wireless capable device management server. (Sharma, column 4, lines 25-33)

As to **claim 2**, Koskiahde- Veerepalli-Sharma does disclose the system wherein said decision data (Veerepalli, [0047]; "mobility bindings") comprises decision rules (Veerepalli, [0047]; where "Care of Address" is used to route the data to the new

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location of the mobile node) and decision parameters(Veerepalli, [0047]; where “Limetime” is the time period for the address will be valid), wherein said interface is arranged for modifying said decision rules and decision parameters. (Veerepalli , [0080]; where the home agent can detect and modify the mobility binding of the mobile node)

As to **claim 3**, Koskiahde- Veerepalli-Sharma does disclose the system said decision part is arranged to dynamically select one of said second type routing addresses (Veerepalli, [0075]; where the home agent has mobility bindings which contain one or more records for each device) from said decision data. (Veerepalli, [0076]; where the inactivity timer tracks the last time communication is received from node and then the home agent makes a decision accordingly)

As to **claim 4**, Koskiahde-Veerepalli-Sharma does disclose the system wherein said decision part is arranged to perform said dynamic selection for each data unit to be forwarded. (Veerepalli ,[0075]; where the home agent has mobility bindings which contain one or more records for each device)

As to **claim 5**, Koskiahde-Veerepalli-Sharma discloses a system wherein said interface is arranged to provide a plurality of control functions (Veerepalli , [0071]; where the home agent stores information describing the mobile nodes to control flow of data) with access to said decision data memory.

As to **claim 7**, Koskiahde-Veerapalli-Sharma does disclose a system wherein one or more of said control functions are network resource management functions. (Veerepalli, [0071]; where home agent manages various kinds of resources to manage the network)

As to **claim 8**, Koskiahde-Veerapalli-Sharma does disclose the system wherein said network control function is arranged to determine parameters related to access links (Veerepalli, [0055]; where IP networks may be the Internet, an intranet, a private IP

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network) over which said mobile nodes access said data unit transmission network (Veerepalli, [0055]; wireless communication system), and to modify said decision data in dependence on said parameters related to access links. (Veerepalli, [0055] [0056]; the routing information concerning the different kinds of data across different links)

As to **claim 9**, this is a method corresponding to system in claim 1. Therefore it has been analyzed and rejected based upon system in claim 1.

As to **claim 10**, this is a method corresponding to system in claim 2. Therefore it has been analyzed and rejected based upon system in claim 2.

As to **claim 11**, this is a method corresponding to system in claim 3. Therefore it has been analyzed and rejected based upon system in claim 3.

As to **claim 12**, this is a method corresponding to system in claim 4. Therefore it has been analyzed and rejected based upon system in claim 4.

As to **claim 13**, this is a method corresponding to system in claim 5. Therefore it has been analyzed and rejected based upon system in claim 5.

As to **claim 15**, this is a method corresponding to system in claim 7. Therefore it has been analyzed and rejected based upon system in claim 7.

As to **claim 16**, this is a method corresponding to system in claim 8. Therefore it has been analyzed and rejected based upon system in claim 8.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOE CHACKO whose telephone number is (571)270-3318. The examiner can normally be reached on Monday-Friday 7:30am-5pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on 571-272-3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. C./

Examiner, Art Unit 2456

/Bunjob Jaroenchonwanit/

Supervisory Patent Examiner, Art Unit 2456